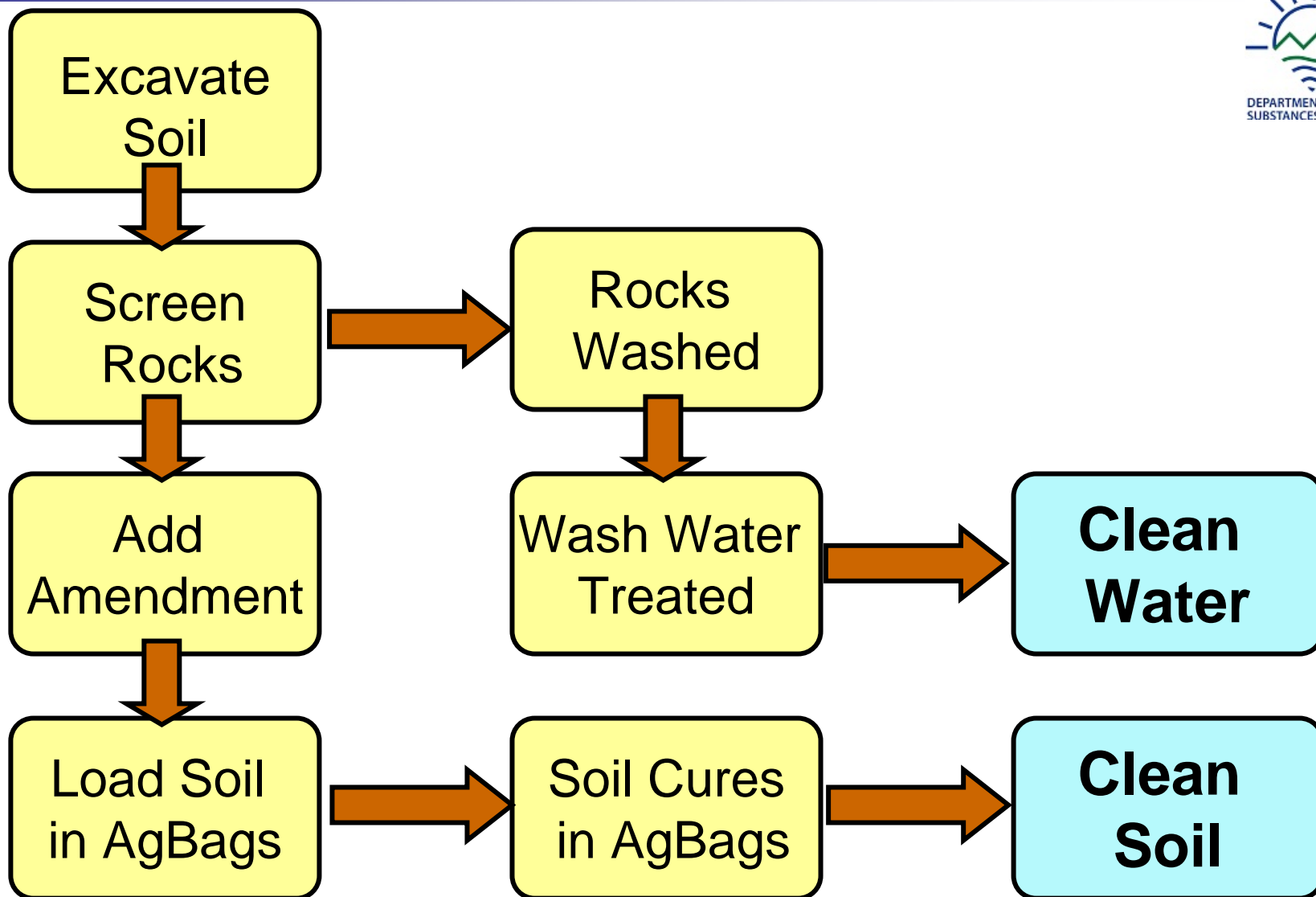


# Implementation of Remedial Action Plan

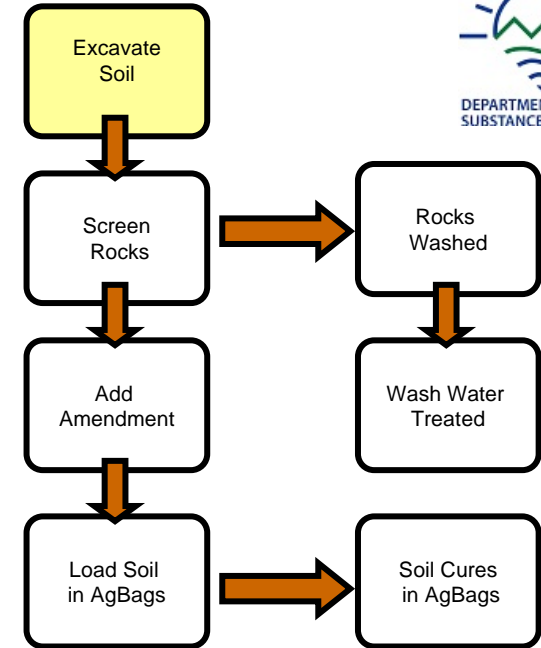
Operable Unit 1  
Former Whittaker Corporation  
Bermite Facility  
May 2006

# Implementation of Remedial Action Plan Presentation Outline

- Treatment Process for Perchlorate Contaminated Soil.
- Excavation Areas;
  - Area 55 Roadway North
  - Area 7 Roadway East
  - Area 7 Roadway North
  - Area 43 Hillside
  - Building 120
  - Area 26
- Area 7 Vapor Extraction System.

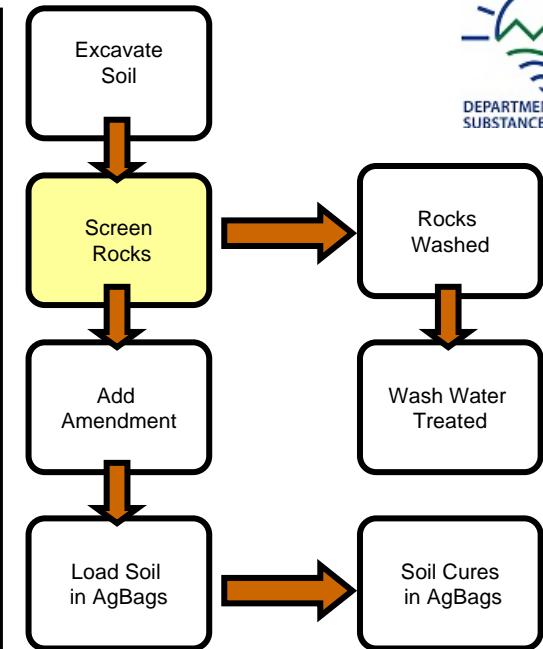


Summary of Treatment Process



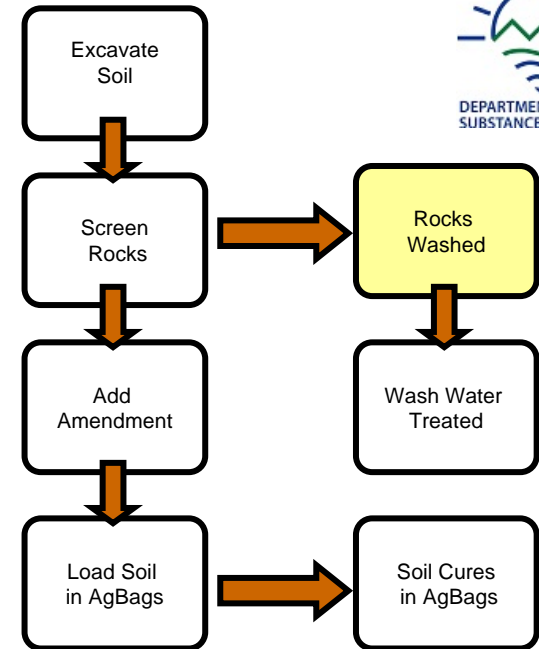
## Soil Excavation At Area 26



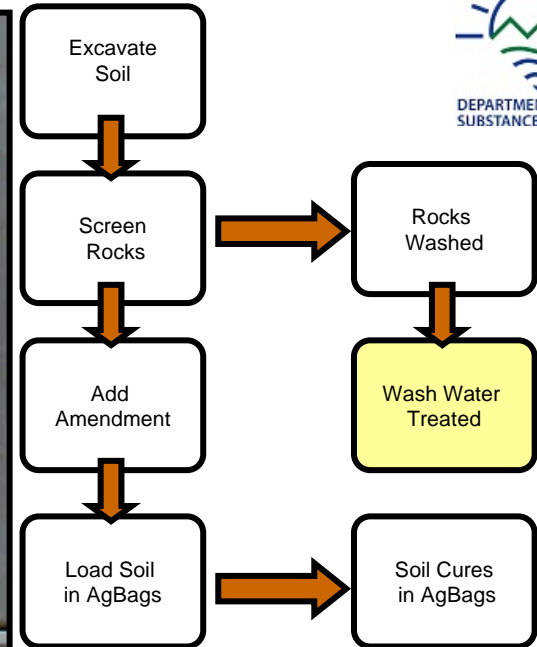


# Screening Plant for Separating Rocks and Soil

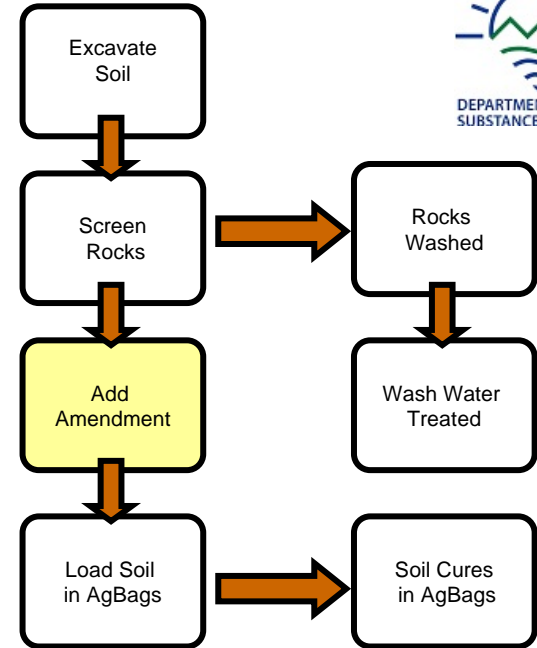




# Washing Soil off of Rocks

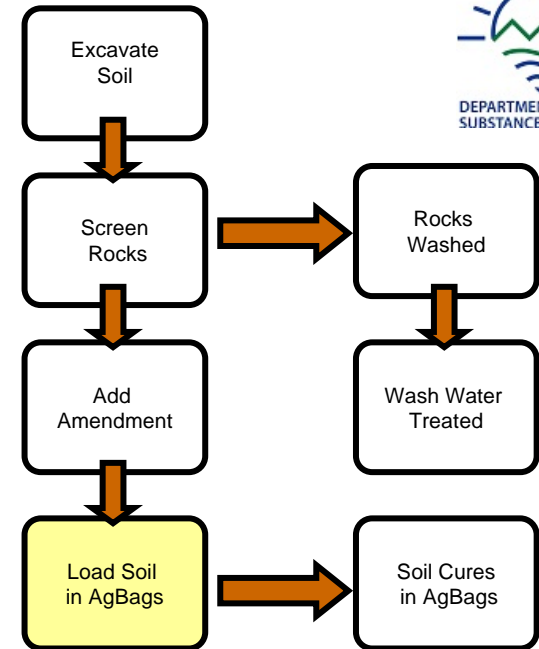


# On-site Water Treatment Plant

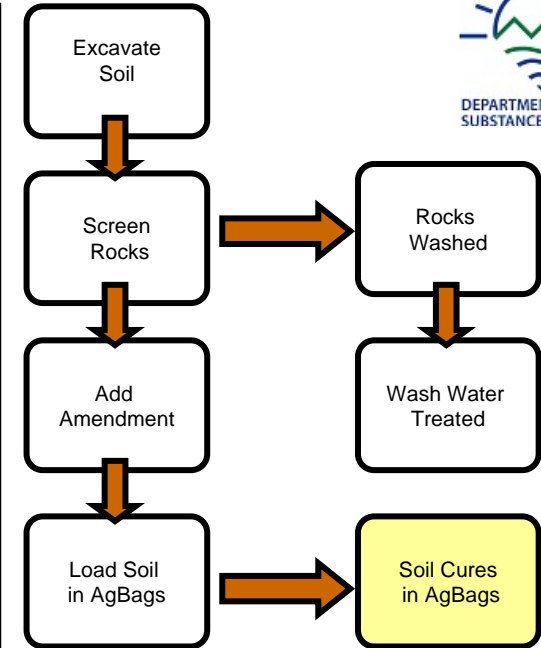


Pugmill adding Amendment (acetic acid) and water to screened soil.





# Loading Soil into AgBag



Loaded AgBags on Treatment Pad



# Area 55 Roadway North



- Propellant Mixing Facility
- Approximately 480 cy of soil removed.
- All confirmation samples were below action level.
- Excavation to 2 feet.
- Excavation completed on May 3, 2006, area has been backfilled and compacted.

# Area 7 Roadway East



- Propellant Grinding Facility
- Approximately 1,650 cy of soil removed.
- Elevated perchlorate concentrations ranged from 559 to 8,490  $\mu\text{g/kg}$ .
- Excavation to 14 feet.
- Excavation completed on May 18, 2006.



# Area 7 Roadway North



- Propellant Grinding Facility
- Approximately 1,710 cy of soil removed.
- Analytical results of confirmation sampling are pending.
- Excavation to 10 feet.

# Area 43 Hillside



- Propellant Mixing Facility
- Approximately 450 cy of soil removed.
- Elevated perchlorate concentrations ranged from 667 to 1,940  $\mu\text{g/kg}$ .
- Excavation to 14 feet.
- Excavation completed on May 24, 2006.

# Building 120



- Contained sump that collected waste water.
- Approximately 1,850 cy of soil removed.
- Elevated perchlorate concentrations range from 814 to 8,130  $\mu\text{g/kg}$ .
- Excavation to 13 feet.
- Excavation requires vertical and lateral expansion to remove elevated perchlorate.



# Area 26



- Former “Hog Out” Area.
- Approximately 3,700 cy of soil removed.
- Elevated perchlorate concentrations range from 687 to 22,800  $\mu\text{g}/\text{kg}$ .
- Excavation to 4 feet.





# Area 7 Vapor Extraction System



- System Summary
  - 20 hp, 500 CFM(max.) Blower
  - 2 Carbon Vessels; 1,000 lb capacity each
  - 8 Vapor Extraction Wells
- Start Date; January 9, 2006
- Removal Rate; 5 to 10 lbs of VOCs per day
- Approximately 580 lbs of VOCs have been removed
- Additional System in Area 55 to start in June, 2006